

the members of the legislature, peers, baronets, &c. Appended is an index of the names of the chief officials in the various departments in the state, so that conversely the office may be ascertained, or the fact whether an office is held at all, wherever a knowledge of the name is associated with a doubt as to the office. The body of the work is not made up of mere lists, however. It contains a well-digested and condensed historical account of all the chief offices and institutions in the state; a description of the duties attached to each; and a great mass of miscellaneous information, constituting in all a handsome volume, clearly printed on good paper, and in all respects well got up, as all Mr. Murray's books are.

Miscellaneous.

SANITARY CONDITION OF PLYMOUTH.—The average mortality of Plymouth being seriously beyond the general average,—25 per 1,000, in fact, in place of 12 to 16 per 1,000,—the Central Board of Health, in virtue of their powers under such circumstances, instructed Mr. B. Rawlinson, one of their superintending inspectors, to call for a preliminary inquiry into the general state of the borough, which has lately been gone into agreeably to notices issued to the inhabitants, the evidence of many of whom has been taken by the inspector, who has also received reports on the questions of water supply, gas, &c. In reference to the subject of a question put to the inspector, as to whether the Board had in certain cases taken into consideration the mortality by cholera, Mr. Rawlinson very properly remarked, that so far from an accession of disease created by cholera or typhus, and an irruption of Irish, being an excuse for increased mortality, there was so much the greater reason why there should be an inquiry, and why further powers should be obtained. A great many ingenious theories had been propounded from time to time to account for cholera: one person said it was in the water, another stated it to be in the tracks of rivers, a third said it settled in particular stratifications, whilst some said it was electric, and others that it was in the atmosphere. Every reason had been assigned which could be assigned, except the right one, and that was *filth*—a commodity, we may say, of which there appears to be more than enough in Plymouth and its neighbourhood.

A PERFORATING MACHINE.—The tunnel of the Troy and Greenfield Railroad, through the Hoosac mountain, is made with one of Wilson's stone-dressing machines. This machine is worked with a steam engine, and will enter from 6 to 15 linear feet per day. The cutters are circular plates of cast-steel, of 14 inches diameter, half an inch thick, and ground, with a bevil on each side, to an edge. They are placed on the rock, at the angles of about 45 degrees, and roll over the surface with great rapidity. The edge is pressed into the rock with great force, and acts as a wedge, prying up and throwing off the rock in a surprising manner. A block of granite, 10 feet long and 4 feet wide, was placed on a carriage, and submitted to a single cutter, gauged to cut 2 inches from its surface. It passed over the entire stone in 22 minutes, and cut off 1,600 lbs. of rock, leaving the same as smooth as any hammer-dressed stone.—*Albany Argus*, U. S.

APPLICATION OF THE THERMOMETER.—Dr. Spurgin, who is always inventing or contriving something new, has formed a neat little instrument for ascertaining the amount of increase of temperature of the various internal organs of the body under inflammation, as compared with those that are not, and the like in fever, where different organs are hotter than others. As far as he has tried it, the results are curious and valuable. It is merely a thermometer fixed in a *hollow cone*, so that the bulb can rest on the part of the body nearest to the inflamed organ, and the heat collected all around it; and the Dr. has even detected one part of the brain hotter than another under fever, and applied leeches accordingly with good effect in reduction of the fever in general.

"IS LOW-PRICED GAS CHEAP GAS?"—Under this rather significant and "taking" but not very sensible or logical title, Messrs. John Tallis and Company have published a sheet of letterpress, in which they state their case of complaint against the Central Gas Consumers' Company for charging them 237l. odd for one year's supply of gas, in place of 129l. odd charged previously by the Chartered Gas Company. The gas of the former company, they allege, has less powerful heating properties than that of the latter; and as their principal use of gas appears to be for heating purposes, they have hence required to consume a great deal more gas than before. On this ground they not very correctly conclude, that as the gas complained of yields less heat, it must also yield less light, which does not necessarily follow, but rather the very contrary. We do not mean to constitute ourselves special pleaders for the Central Gas Company, however, whose unseemly proposal of amalgamation with an antagonist to whom they stood opposed as consumers against monopoly and overcharge, and who made desperate endeavours to destroy them as such,—at once threw a stain of suspicion on them which could not but cause a withdrawal of confidence from them. For all that we know, their gas may be inferior in every respect to the Chartered Company's *equally cheap*, or "low priced" rather, be it noted—nay, according to Messrs. Tallis's statement, their still cheaper—article; but there is something glaringly inconsistent in the conclusions Messrs. Tallis wish thereby to establish. Some "low-priced" gas may be bad; but equally "low-priced" gas, according to their own admission, is good: indeed the Chartered Company, to whose gas they have returned, not only charge just 4s. a thousand cubic feet, as the Consumers' Company do, but, more than that, have engaged to supply all Messrs. Tallis want for 110l. a year instead of 237l. The fallacy, however, does not rest here merely. Much high-priced gas is also bad. Are we to conclude, then, that high-priced gas is cheap, even though it were proved that low-priced gas is dear? The whole argument is a tissue of inconsequent absurdity. The quality of the gas of the Central Consumers' Company ought nevertheless to be closely criticised and tested, both as to its heating and its lighting quality; for the statement of Messrs. Tallis is assuredly startling, and it is alleged to be by no means a solitary or exceptional one.

THE CURVILINEAR OMNIBUS.—A new build of omnibus has been on private view at Mr. Tucker's, New Kent-road, which seems to have some good points mixed with as many bad. The seats are divided, but are not wide enough, especially the furthest one on each side from the door, and the old objectionable end seat increases the inconvenience, though otherwise very comfortable. The interior is ventilated both above and beneath, and the glasses are therefore fixed so as to prevent either rattling noise or disputes about opening and shutting them. The back of each seat is curved outwards, so that a greater width of passage is obtained. The feet sink into boxes, to prevent treading on them, but the openings are apt to trip one on entering, if not occupied. Between and above each seat is a bell-pull acting on a single bell near the conductor's place. Access to the top is facilitated by steps.

BOARDINGS.—An inhabitant of Edgeware-road complains of a boarding being erected in front of a house under repair, without having a railed-in footway for the convenience and safety of passengers. We would advise him to give notice of the fact in a formal complaint to the surveyors of pavements.

WAGES IN THE MIDDLE OF THE WEEK.—According to a Glasgow paper, the principal ironfounders of that important place have commenced paying their workmen on Wednesday, at two o'clock, instead of Saturday; and we learn that the expectations of the humane and patriotic masters have been more than realised. The workmen returned after dinner, almost in every instance, leaving their wages behind them with their families, who have now leisure and daylight to seek for the cheapest markets and spend the money to the best advantage.

ENGLISH HOUSE IN AMERICA.—A house is about to be built for Mr. Shipley, in a beautiful district near the town of Wilmington, in the United States, and distant about twenty miles from Philadelphia, from the designs of Mr. G. Williams, architect, of Liverpool. The windows of the entertaining rooms command extensive views of the Delaware river and the country through which it flows. The back ground consists of primary rocks, covered with woods. The external walls of the house are to be built of granite rubble, conured every 12 or 14 inches in height; the quoins and window dressings of white marble. A verandah of wood projects 8 feet, to afford shelter from the rays of the summer sun, as well as an agreeable place for recreation and enjoyment. The house is heated by the English system of open fire, in addition to the American method of stoves, which are to be made use of as auxiliaries in severe weather. Attached to the drawing-room is a spacious conservatory, at the end of which is a polygonal spire, containing a fountain, which forms a termination to the vista through the room.

OFFICE OF SURVEYOR OF PUBLIC BUILDINGS AT BIRMINGHAM.—In council, last week, the mayor brought forward the subject of a proposal in a report by the General Purposes Committee that Mr. D. R. Hill should be appointed to this office, at a salary of 250l. a year. He read a memorial from the Society of Architects, signed by Mr. S. Hemming, as chairman, deprecating the appointment as proposed, and praying that an architect should be chosen at a fixed salary, and that he should devote his whole time to the duties of the office. Alderman Hawkes presented a similar memorial from eighteen of the resident architects of the town; and the mayor then moved that the whole question be referred to the committee itself to report. Alderman Muntz moved an amendment, to the effect that that part of the report which recommended the appointment of the surveyor of public buildings be not approved, such officer not being required at present. After some discussion and difference of opinion on the subject, expressed by various members of the council, Alderman Muntz's amendment was finally adopted by a majority of twenty-eight to twenty-six.

INTERNAL QUOINS—CHURCHES.—At a meeting of the Ecclesiological Society (on the 13th January), it was suggested, with reference to the great difficulty frequently found in the attempt to show the stonework of quoins, &c. on account of the face of the quoins being flush with the face of the wall, and so the plastering having some projection beyond the quoins, that this might well and easily be got over, by following what was an old practice, and a very good and rational practice too,—the termination of the plastering in a pattern at the edge. Examples of this still remain round most of the windows at the chapel of St. Cross Hospital, and in a chapel in Gloucester Cathedral, and doubtless elsewhere also. In both cases the plaster shows an edge about a quarter of an inch in thickness, finished either with a zigzag or a wavy line, or in a succession of scollops and other patterns.

PROPOSED GEOLOGICAL MUSEUM FOR SCOTLAND.—The Treasury has been memorialized by the Highland and Agricultural Society of Scotland, on the subject of establishing a Museum of Economic Geology and Chemistry in Scotland. The memorial sets forth "that there does not exist in Scotland any Museum of Economic Geology and Chemistry, and that the establishment of such an institution would be of great public benefit, by affording the means of obtaining definite and correct information with regard to the mineral wealth of Scotland, its ores and coals, its building, paving, and ornamental stones, granites, and marbles; the localities and composition of its soils; the qualities of its different clays for brick, tile, or ware; and of its limestones for building purposes and manures; and generally, by developing the industrial resources of its territorial products." The subject has also been taken up in the city council of Edinburgh. The memorial quoted also prays the Government to extend the geological survey to Scotland.